

Rpt. 4.

REPORT ON MACHINERY.

No. 69 269
SAT. JAN 12 1907
FRI. DEC 7 1906

Port of London

Received at London Office

No. in Survey held at

Date, first Survey Sep 19

Last Survey Nov 23rd 1906

Reg. Book.

5466 on the

Lt No 91 Goolle S. B. Co Margaret

(Number of Visits)

Jan 3rd 1907

Master

Built at

Goolle

By whom built

Goolle S. B. Co

When built

1907

Engines made at

St Yarmouth

By whom made

Crabtree & Co Ltd No 2914

when made

1906

Boilers made at

Shields

By whom made

J. T. Blithingham

when made

1906

Registered Horse Power

Owners

Lancashire Steam Fishing Co

Port belonging to

Fleetwood

Nom. Horse Power as per Section 28

86

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Triple expansion & bonding

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

13 1/2, 22 1/2 & 37

Length of Stroke

24

Revs. per minute

100

Dia. of Screw shaft

as per rule 7.63

Material of

steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

yes

Is the after end of the liner made water tight

in the propeller boss

If the liner is in more than one length are the joints burned

yes

If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

S

If two

liners are fitted, is the shaft lapped or protected between the liners

yes

Length of stern bush

3'-9"

Dia. of Tunnel shaft

as per rule 6.69

as fitted 7.3

Dia. of Crank shaft journals

as per rule 7.61

as fitted 7.3

Dia. of Crank pin

7 3/8

Size of Crank webs

10 1/2 x 6

Dia. of thrust shaft under

collars

Dia. of screw

9'-6"

Pitch of Screw

12'-0"

No. of Blades

4

State whether moveable

No

Total surface

33 1/2

No. of Feed pumps

2

Diameter of ditto

2 1/2

Stroke

12

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

2 1/2

Stroke

12

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps 6" x 7" & 4 1/2" x 3" x 5"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 3, one 2", one 2 1/2", one 3"

In Holds, &c.

Three 2 1/2" one to each hold

No. of Bilge Injections

1

sizes

4"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

yes 2 1/2"

Are all the bilge suction pipes fitted with roses

yes

Are the roses in Engine room always accessible

yes

Are the sluices on Engine room bulkheads always accessible

0

Are all connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

yes

Are the Discharge Pipes above or below the deep water line

above

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

yes

Are the Blow Off Cocks fitted with a spigot and brass covering plate

yes

What pipes are carried through the bunkers

hold suction

How are they protected

wood casing

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

yes

Dates of examination of completion of fitting of Sea Connections

19 10 06

of Stern Tube

19 10 06

Screw shaft and Propeller

19 10 06

Is the Screw Shaft Tunnel watertight

None

Is it fitted with a watertight door

—

worked from

—

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

1506 1/2

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

—

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

plate

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

W7421-0073

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____

Working pressure _____ tested by hydraulic pressure to _____ Date of test _____ When made _____ Where fixed _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Date of adjustment _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Dia. of donkey boiler _____ Length _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:—Two each top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set coupling bolts and nuts, one set feed and bilge pump valve and a quantity of assorted bolts, nuts and stud iron.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - 1906 Sep 19. Oct 5. 25. 30. Nov 9. 21. 23. During erection on board vessel - Hull: 1906 - Oct. 12. 19. Nov. 14. 16. 17. 21. 22. 23. 24. 27. 30. Dec. 1. 4. 7. 8. 10. 11. 28. 29. 1907 - Jan 1. 2. 3. = 22. Total No. of visits 7.

Is the approved plan of main boiler forwarded herewith yes

Dates of Examination of principal parts—Cylinders Oct 5th Slides Oct 5th Covers Oct 5th Pistons Oct 5th Rods Oct 5th

Connecting rods Oct 5th Crank shaft Oct 5th Thrust shaft 19. 10. 06 Tunnel shafts 19. 10. 06 Screw shaft 12. 10. 06 Propeller 19. 10. 06

Stern tube Oct 5th Steam pipes tested 7. 12. 06 Engine and boiler seatings 14. 11. 06 Engines holding down bolts 2. 1. 07

Completion of pumping arrangements 8. 1. 07 Boilers fixed 2. 1. 07 Engines tried under steam 6. 1. 07

Main boiler safety valves adjusted 2. 1. 07 Thickness of adjusting washers 3/16" + 1/4"

Material of Crank shaft Steel Identification Mark on Do. 1749 Material of Thrust shaft Steel Identification Mark on Do. 1749

Material of Tunnel shafts Steel Identification Marks on Do. 1749 Material of Screw shafts Steel Identification Marks on Do. 1749

Material of Steam Pipes Solid drawn Copper Test pressure 400 lbs. 0

General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been constructed under special survey the materials & workmanship being of good description.

The thrust, intermediate, & tail shafting has not been examined at St. Harmouth. the propellers, steam pipes are to be sent direct to Goole from Hull.

This engine was dispatched before a final examination of the completed engine was made.

In our opinion this machinery is eligible for classification with record of Red Club when the link motion & condensers & general fittings of the engine have been examined & the whole of the machinery fitted on board & seen working under steam.

The amount of Entry Fee £ 1. 0. 0 When applied for, London 25/3/07

Donkey Boiler Fee Hull 19. 07. 12. 19. 07 When received, 11-1-07 10. 3. 4 12. 1. 07

Travelling Expenses (if any) £ 1. 4. 4

Approved from A. J. Barrett F. L. Linton

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

TUES. JAN 15 1907

Assigned

Incl. cert written 15. 1. 07.



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